PLAY & LEARN

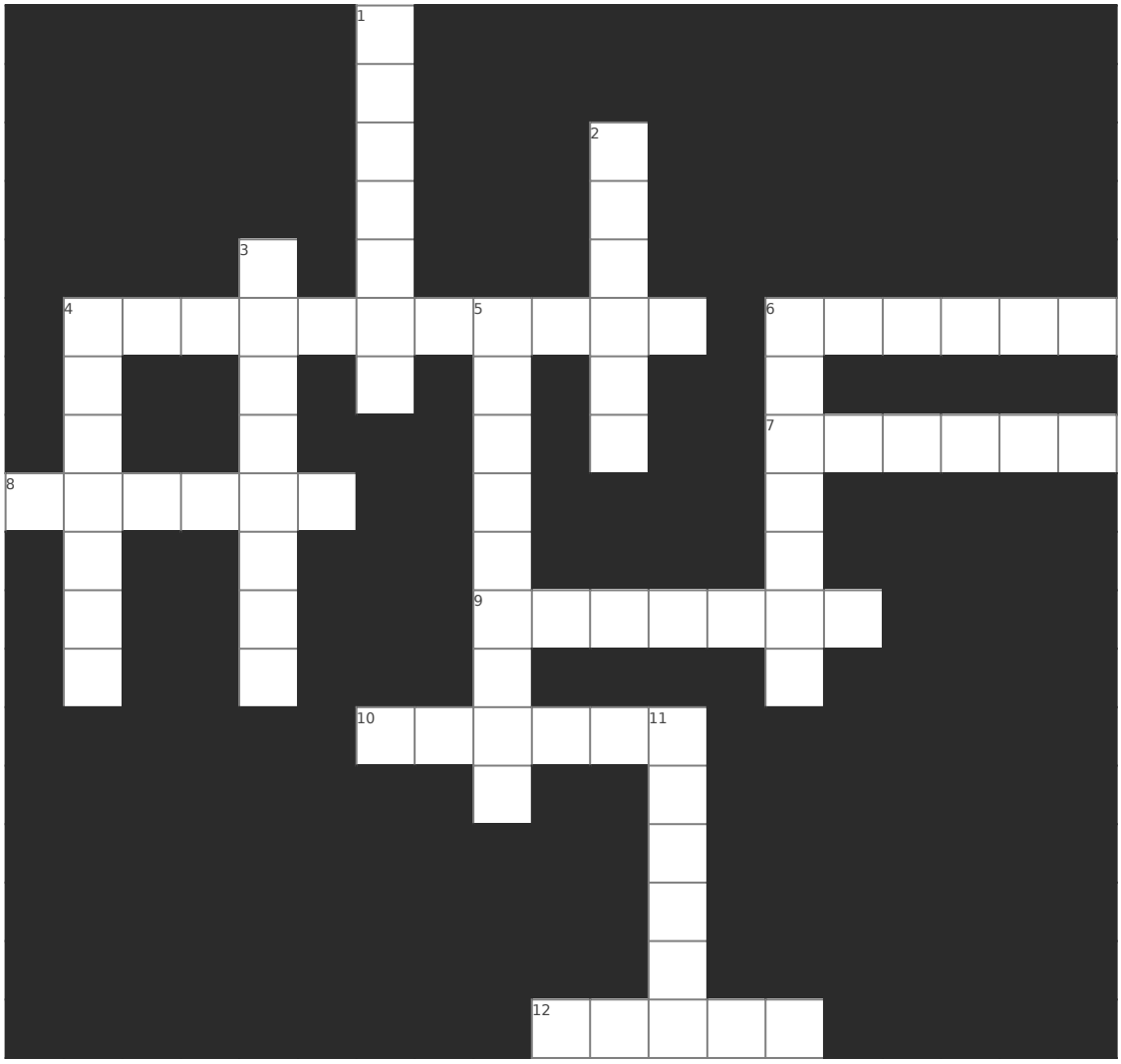
A puzzle workbook — crosswords, word searches, scrambles and quiz games

Print it. Solve it. Race a friend. Answer keys are at the back — no peeking.

#	Puzzle	Play it	Time
1	The Crossword	Solo or pairs	15 min
2	Word Search	Solo — race the clock	10 min
3	Scrambled Terms	Solo	8 min
4	Odd One Out	Teams of 4	10 min
5	Chapter Scrabble	Groups of 3–4	20 min
6	Who Am I? — Clue Cards	Whole class	15 min
7	True or False Sprint	Whole class, standing	6 min
8	Bingo	Whole class	15 min
9	Two Truths and a Lie	Pairs	10 min
10	The Escape Challenge	Teams of 4	25 min

Puzzle 1 · The Crossword

Every answer is a word from this chapter. Fill the white squares — one letter per square.



ACROSS

4. transfer of pollen from anther to stigma (11)

6. the female reproductive part of a flower (6)

7. the male reproductive part of a flower (6)

8. the male organs that produce sperm (6)

9. the pouch that holds the testes (7)

10. the organ where a fetus develops (6)

12. the female organ that produces eggs (5)

DOWN

1. asexual reproduction seen in yeast (7)

2. the cell formed after fertilisation (6)

3. the organ connecting fetus to mother for nutrient exchange (8)

4. the stage when reproductive organs mature (7)

5. a three-month period of human pregnancy (9)

6. surname of the scientist who disproved spontaneous generation (7)

11. the sticky tip of a pistil that receives pollen (6)

Puzzle 2 · Word Search

16 terms are hiding in the grid — across, down, diagonally, and backwards. Circle each one, then tick it off the list. Beat 10 minutes and you win.

R	U	E	T	S	A	P	F	J	Z	W	I	E	U	Z
D	D	X	A	M	T	C	N	B	W	X	H	M	N	K
S	T	A	M	E	N	E	J	X	E	D	D	B	V	V
D	N	H	Y	S	D	W	S	V	S	P	E	R	M	Q
L	I	T	S	I	P	L	E	T	A	Y	R	A	V	O
S	E	F	S	G	V	T	X	P	E	G	S	E	E	D
W	D	T	G	I	O	A	Q	C	U	S	I	A	D	U
B	M	E	O	G	C	T	F	G	L	B	T	N	C	F
L	U	X	Y	X	F	N	A	J	L	T	E	Y	A	V
G	X	Z	J	L	D	E	C	H	Q	L	F	R	T	Y
U	T	E	R	U	S	C	V	S	E	P	A	L	T	M
L	W	N	E	Y	X	A	J	R	I	Y	D	E	P	Y
R	A	N	B	F	C	L	G	N	I	D	D	U	B	T
D	S	X	E	E	I	P	V	O	I	N	D	H	B	A
J	U	A	M	G	I	T	S	J	O	Y	R	J	R	O

☐ PLACENTA	☐ PUBERTY	☐ BUDDING
☐ PASTEUR	☐ ZYGOTE	☐ TESTES
☐ UTERUS	☐ STAMEN	☐ PISTIL
☐ STIGMA	☐ VAGINA	☐ OVARY
☐ SPERM	☐ SEPAL	☐ SEED
☐ EGG		

Race Rules

- **Solo:** find all the words. Note your time at the top of the page.
- **Pairs:** one partner finds across-and-down words, the other finds diagonals. First pair to complete the list wins.
- **Hard mode:** cover the word list. Find as many chapter terms as you can in 5 minutes.
- **Champion move:** for every word you find, say what it means out loud. No meaning, no point.

Puzzle 3 · Scrambled Terms

Every row is a chapter word with its letters shuffled. Unscramble it. The clue in brackets is your lifeline — try to solve without it first.

#	Scrambled letters	Clue	Your answer
1	O F I T T I R N S A I E L	(fusion of sperm and egg)	_____
2	O L T I N I N L P A O	(transfer of pollen from anther to stigma)	_____
3	S E A O L T L P N N L I I O F	(pollen transferring within the same flower)	_____
4	M E L S A N I	(____ vesicles — glands adding fluid to semen)	_____
5	S E V L I C E E T	(____ breeding — choosing desirable traits in agriculture)	_____
6	E T I U S S	(____ culture — growing plantlets from single cells)	_____
7	R T E E I T M S R	(a three-month stage of human pregnancy)	_____
8	P A S U N O N E O S T	(Pasteur disproved ____ generation using swan-necked flasks)	_____

Make It a Game

Beat the Bell: the teacher sets a 60-second timer. Every unscrambled word inside the bell = 1 point; a word you can also *define* = 3 points.

Chain Scramble: in a circle, each student scrambles a chapter word for the person on their left. Miss it and you are out. Last student standing wins.

Puzzle 4 · Odd One Out

Three belong together. One does not. Circle the odd one — then write why in one line. The "why" is where the marks are.

#	Which is the odd one out?	Because…
1	Stamen · Pistil · Sepal · Xylem	_____
2	Testes · Ovary · Uterus · Fulcrum	_____
3	Budding · Spore formation · Tissue culture · Fertilisation	_____
4	Sperm · Egg · Zygote · Neuron	_____
5	First trimester · Second trimester · Third trimester · Meristem	_____
6	Self-pollination · Cross-pollination · Selective breeding · Sublimation	_____

Puzzle 5 · Chapter Scrabble

Play in groups of 3–4. You have one shared rack of letter tiles. Build only terms from this chapter — no ordinary English words allowed.

Your tile rack — cut these out or write them on paper squares:

A 1	**B** 3	**C** 3	**D** 2	**E** 1	**G** 2	**H** 4
I 1	**L** 1	**M** 3	**N** 1	**O** 1	**P** 3	**R** 1
S 1	**T** 1	**U** 1	**V** 4	**X** 8	**Y** 4	**Z** 10

Scoring:

You did this	Points
Each letter tile used	Its tile value
Word is a term from this chapter	× 2
Word is 8 letters or longer	+ 10 bonus
You can state its meaning correctly	+ 5
You can connect it to a real-life example	+ 3
Word is *not* in this chapter (challenged and lost)	− 5

How a Round Works

1. Player builds a word from the rack and lays it down.
2. Any opponent may **challenge** within 10 seconds: "That's not in this chapter."
3. Open the textbook. If the challenger is right, the word is removed and the builder loses 5 points. If the challenger is wrong, the *challenger* loses 5 points.
4. Builder states the meaning to claim the +5 bonus. The group votes on whether it was correct.
5. Play 6 rounds. Highest total wins.

Target Words (worth the most — do not show your opponents)

FERTILISATION · POLLINATION · PLACENTA · TRIMESTER · SPONTANEOUS · SELECTIVE · BUDDING · ZYGOTE

Puzzle 6 · Who Am I? — Clue Cards

Cut along the lines. One student draws a card and reads only the first clue aloud; the class guesses. Wrong guess? Read clue 2. Fewer clues used = more points.

CARD 1 ① I form when sperm and egg fuse. ② I am the very first cell of a new human. ③ I am a zygote.	**CARD 2** ① I am the stage when reproductive organs mature. ② Voice change and growth spurts mark me. ③ I am puberty.
CARD 3 ① I produce sperm. ② I am housed inside the scrotum. ③ I am the testes.	**CARD 4** ① I produce eggs. ② I am a female reproductive organ. ③ I am the ovary.
CARD 5 ① I am where a fetus develops. ② I am also called the womb. ③ I am the uterus.	**CARD 6** ① I connect the fetus to the mother. ② Nutrients and oxygen pass through me. ③ I am the placenta.
CARD 7 ① I am the male part of a flower. ② I hold the anther and filament. ③ I am the stamen.	**CARD 8** ① I am the female part of a flower. ② I include the stigma, style and ovary. ③ I am the pistil.
CARD 9 ① I am a form of asexual reproduction seen in yeast. ② A small outgrowth separates to form a new organism. ③ I am budding.	**CARD 10** ① I disproved spontaneous generation. ② My swan-necked flasks are famous. ③ I am Louis Pasteur.
CARD 11 ① I let one plant cell regrow a whole plantlet in a lab. ② India uses me heavily for banana and sugarcane. ③ I am tissue culture.	**CARD 12** ① I am a three-month stage of human pregnancy. ② There are three of me in a full-term pregnancy. ③ I am a trimester.

Scoring: guessed after clue ① = **5 points** · after ② = **3 points** · after ③ = **1 point**

Puzzle 7 · True or False Sprint

Everyone stands. Teacher reads a statement. True → stay standing. False → sit down. Get it wrong and you are out. Last student standing wins.

#	Statement	Your call
1	A zygote forms from the fusion of sperm and egg.	☐ True ☐ False
2	Puberty is the stage when reproductive organs mature.	☐ True ☐ False
3	The testes are a female reproductive organ.	☐ True ☐ False
4	The uterus is where a fetus develops.	☐ True ☐ False
5	The placenta connects the fetus to the mother.	☐ True ☐ False
6	Budding is an example of sexual reproduction.	☐ True ☐ False
7	Self-pollination occurs within the same flower.	☐ True ☐ False
8	Louis Pasteur proved spontaneous generation was correct.	☐ True ☐ False
9	Tissue culture lets a single plant cell regenerate a whole plantlet.	☐ True ☐ False
10	A human pregnancy has three trimesters.	☐ True ☐ False
11	The stigma is the sticky tip of the pistil that receives pollen.	☐ True ☐ False
12	Selective breeding involves choosing desirable traits in agriculture.	☐ True ☐ False
13	Sperm are produced in the ovary.	☐ True ☐ False
14	Cross-pollination transfers pollen between two different flowers.	☐ True ☐ False

Puzzle 8 · Bingo

Each student fills the empty grid below with any 16 words from the word bank — in any order, one per box. The teacher then reads out meanings, not names. Cross a box only when its meaning is called. First to a full row, column or diagonal shouts BINGO.

Word bank — choose any 16:

Zygote	Puberty	Testes	Ovary
Uterus	Placenta	Pollination	Stamen
Pistil	Stigma	Budding	Trimester
Fertilisation	Tissue culture	Selective breeding	Spontaneous generation

Your bingo card:

> **Caller’s List (teacher only — read the meaning, never the name)**
> ① "I form from the fusion of sperm and egg." ② "I am the stage when reproductive organs mature." ③ "I produce sperm." ④ "I produce eggs." ⑤ "I am where a fetus develops." ⑥ "I connect the fetus to the mother for nutrient exchange." ⑦ "I am the transfer of pollen from anther to stigma." ⑧ "I am the male reproductive part of a flower." ⑨ "I am the female reproductive part of a flower." ⑩ "I am a form of asexual reproduction seen in yeast." □ "I am a three-month stage of human pregnancy." □ "I let a single plant cell regrow a whole plantlet in a lab."

Puzzle 9 · Two Truths and a Lie

Each set has three statements. Two are true, one is a lie. Circle the lie — and correct it in one line.

Set 1

(a) A zygote forms from fertilisation.
(b) A zygote is the same as a gamete.
(c) A zygote is the first cell of a new organism.

The lie is _____ . Corrected: _____

Set 2

(a) The testes produce sperm.
(b) The ovary produces sperm.
(c) The ovary produces eggs.

The lie is _____ . Corrected: _____

Set 3

(a) Budding is asexual reproduction.
(b) Budding is sexual reproduction.
(c) Yeast reproduces by budding.

The lie is _____ . Corrected: _____

Set 4

(a) Pasteur used swan-necked flasks.
(b) Pasteur proved spontaneous generation was true.
(c) Pasteur's work disproved spontaneous generation.

The lie is _____ . Corrected: _____

Puzzle 10 · The Escape Challenge

Solve all five gates. Each gives you one digit. Collect all five to unlock the exit code.

🔒 GATE 1 — The Zygote Gate

Count the letters in ZYGOTE.

Digit: ☐

🔒 GATE 2 — The Pregnancy Gate

How many trimesters are in a human pregnancy? Use that number.

Digit: ☐

🔒 GATE 3 — The Flower Gate

How many main reproductive parts of a flower are named (stamen, pistil)? Use that number.

Digit: ☐

🔒 GATE 4 — The Asexual Gate

How many types of asexual reproduction are named (budding, spore formation, tissue culture)? Use that number.

Digit: ☐

🔒 GATE 5 — The Pasteur Gate

Count the letters in PASTEUR.

Digit: ☐

EXIT CODE: ☐ ☐ ☐ ☐ ☐

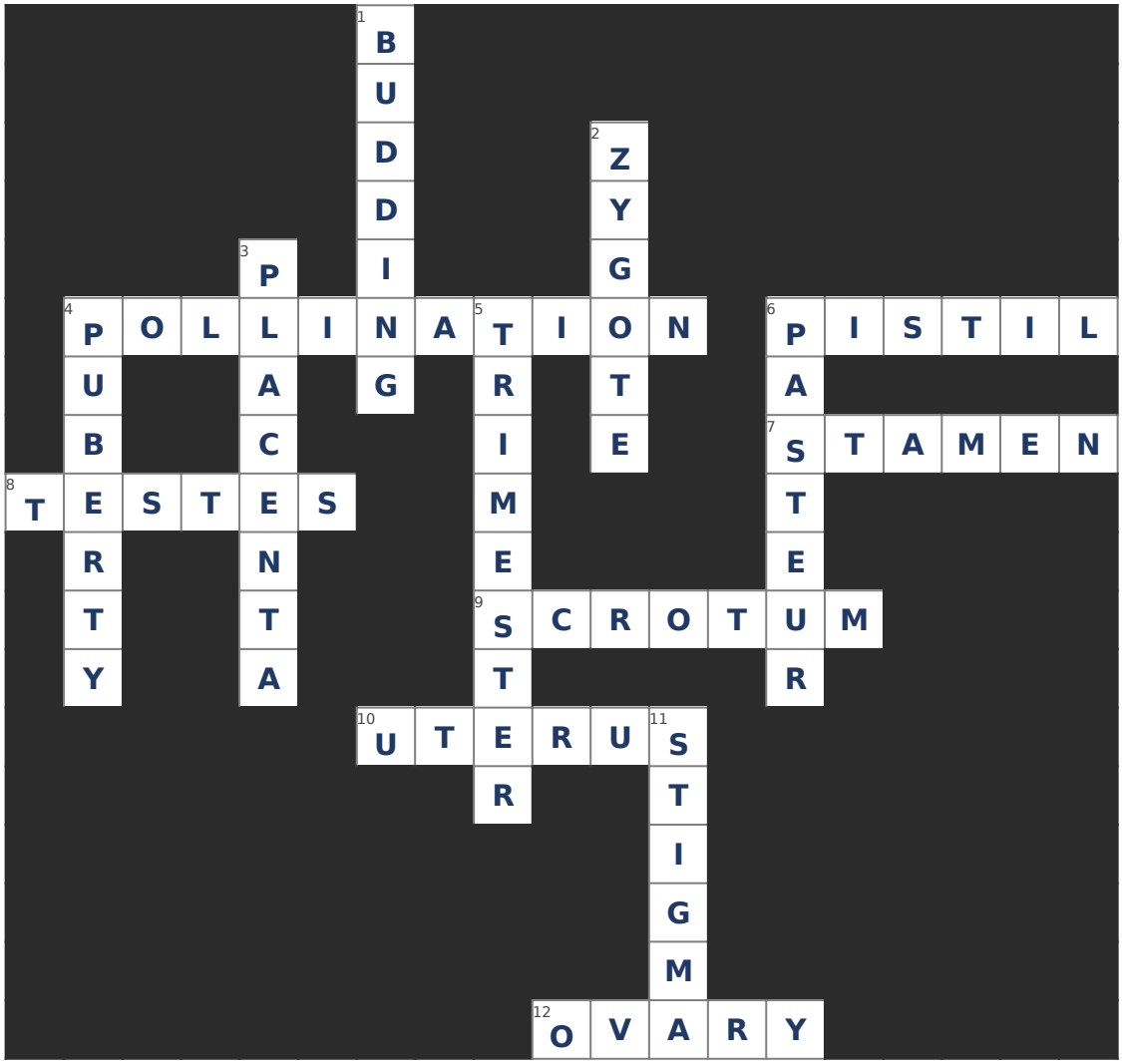
🔒 Teacher's note

Hide the gate cards around the classroom. Teams rotate every 4 minutes. First team to reach the door with the correct code escapes. Losing teams try again next period.

Answer Keys

Teachers and self-checkers only. Solve first — the puzzle is the point.

Puzzle 1 · Crossword — Solved Grid


1 B U D D I N G
2 Z Y G O T E
3 P L A C E N T A
4 P O L L I N A T I O N
U G R T
B I E
5 T R I M E S T E R
6 P I S T I L
A
7 S T A M E N
T
E
8 T E S T E S
R
T
Y
9 S C R O T U M
T
10 U T E R U S
R
T
I
G
M
11
12 O V A R Y

Across: 4 POLLINATION · 6 PISTIL · 7 STAMEN · 8 TESTES · 9 SCROTUM · 10 UTERUS · 12 OVARY

Down: 1 BUDDING · 2 ZYGOTE · 3 PLACENTA · 4 PUBERTY · 5 TRIMESTER · 6 PASTEUR · 11 STIGMA

Puzzle 2 · Word Search — Solved Grid

R	**U**	**E**	**T**	**S**	**A**	**P**	F	J	Z	W	I	E	U	Z
D	D	X	A	M	**T**	C	N	B	W	X	H	M	N	K
S	**T**	**A**	**M**	**E**	**N**	**E**	J	X	E	D	D	B	V	V
D	N	H	Y	S	D	W	**S**	**V**	**S**	**P**	**E**	**R**	**M**	Q
L	**I**	**T**	**S**	**I**	**P**	L	**E**	**T**	**A**	**Y**	**R**	**A**	**V**	**O**

S	E	F	S	G	V	T	X	P	E	G	S	E	E	D
W	D	T	G	I	O	A	Q	C	U	S	I	A	D	U
B	M	E	O	G	C	T	F	G	L	B	T	N	C	F
L	U	X	Y	X	F	N	A	J	L	T	E	Y	A	V
G	X	Z	J	L	D	E	C	H	Q	L	F	R	T	Y
U	T	E	R	U	S	C	V	S	E	P	A	L	T	M
L	W	N	E	Y	X	A	J	R	I	Y	D	E	P	Y
R	A	N	B	F	C	L	G	N	I	D	D	U	B	T
D	S	X	E	E	I	P	V	O	I	N	D	H	B	A
J	U	A	M	G	I	T	S	J	O	Y	R	J	R	O

Puzzle 3 · Scrambled Terms

1. FERTILISATION · 2. POLLINATION · 3. SELFPOLLINATION · 4. SEMINAL · 5. SELECTIVE · 6. TISSUE · 7. TRIMESTER · 8. SPONTANEOUS

Puzzle 4 · Odd One Out

#	Odd one	Because
1	Xylem	stamen, pistil and sepal are all flower parts; xylem is a plant transport tissue from Chapter 3
2	Fulcrum	testes, ovary and uterus are all reproductive organs; fulcrum belongs to Chapter 7
3	Fertilisation	budding, spore formation and tissue culture are all asexual; fertilisation is sexual reproduction
4	Neuron	sperm, egg and zygote are all reproductive cells; neuron is a nervous-tissue cell from Chapter 3
5	Meristem	the three trimesters divide human pregnancy; meristem is a Chapter 3 plant-tissue term
6	Sublimation	self-pollination, cross-pollination and selective breeding are all reproduction/breeding terms; sublimation is a Chapter 5 change of state

Puzzle 7 · True or False Sprint

1-T · 2-T · 3-F · 4-T · 5-T · 6-F · 7-T · 8-F · 9-T · 10-T · 11-T · 12-T · 13-F · 14-T

Puzzle 9 · Two Truths and a Lie

Set	The lie	Correction
1	b	A zygote is different from a gamete — it forms AFTER two gametes (sperm and egg) fuse.
2	b	The ovary produces eggs, not sperm — sperm come from the testes.
3	b	Budding is a form of ASEXUAL reproduction, not sexual.
4	b	Pasteur DISPROVED spontaneous generation — he did not prove it true.

Puzzle 10 · The Escape Challenge

EXIT CODE: 6 · 3 · 2 · 3 · 7

(Answer: 6) (Answer: 3) (Answer: 2) (Answer: 3) (Answer: 7)

Now go find a flower and identify its stamen and pistil for yourself. □□